

REMARKS

The application has been carefully reviewed in light of the Office Action dated January 13, 2006. Claims 7 to 13 are in the application, with Claims 7 and 8 being independent. Claims 1 to 6 have been cancelled without prejudice to Applicants' right to present these claims in a later-filed division. Claims 7 and 8 have been amended herein. Reconsideration and further examination are respectfully requested.

Claims 7, 8, 12, and 13 were rejected under 35 U.S.C. § 102(b) over Japan 58-201377 (Kiyota). Claims 7 to 10 were rejected under 35 U.S.C. § 102(b) over U.S. Patent No. 5,254,481 (Nishida). Claims 7 to 12 were rejected under 35 U.S.C. § 102(b) over U.S. Publication No. 2002/0092464 (Nakagawa). Claims 7 to 13 were rejected under 35 U.S.C. § 103(a) over Japan 62-101084 (Shibuya). Claim 13 was rejected under 35 U.S.C. § 103(a) over Nakagawa in view of Kiyota. The rejections are respectfully traversed.

According to a feature of the invention as recited by Claims 7 and 8, the surface layer is provided on a substrate of silicon having a purity of less than 99.99%. By virtue of this feature, it is made possible to improve short circuit current of a solar cell while at the same time reducing cost. See, for example, page 10, line 13 to page 11, line 4 of the instant specification.

None of the applied documents is seen to disclose or suggest at least the above-discussed feature.

Moreover, with respect to Nakagawa, this document is not seen to disclose or suggest the feature recited by Claim 7 that the surface layer contains an inclined plane

and plural grooves each formed by a gap portion communicated with the inclined plane, or the feature recited by Claim 8 that the surface layer contains an inclined plane and plural protrusions each having an overhang in a lateral direction, wherein plural grooves each having an opening narrowed by the overhang of at least one of the protrusions are formed in the surface layer.

The Office Action concedes that Nakagawa does not explicitly disclose these features. However, the Office Action takes the position that these features would inherently result since Nakagawa's method is similar to that disclosed by Applicants. Applicants respectfully disagree.

In the method described at paras. [0102] to [0106] of Nakagawa, the temperature of the melt is not decreased when the silicon layer is grown on the substrate. In contrast, in the method described at pages 6 and 7 of the instant application, the temperature of the melt is decreased while growing the silicon layer. Further, in the method described in Nakagawa, the temperature at which growth of the silicon layer begins is 950°C. In contrast, in the Example described at page 15 of the instant application, the temperature is 886°C.

In view of these differences between Nakagawa's method and that described in the instant application, it is not believed that the burden of proof for establishing inherency has been met. As set forth at MPEP § 2112, the extrinsic evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference. The mere fact that a certain thing may result from a given set of circumstances is insufficient.

Further, with respect to Shibuya, this document is not seen to disclose or suggest the feature recited by Claim 7 of a surface layer composed of silicon, the surface layer containing an inclined plane and plural grooves each formed by a gap portion communicated with the inclined plane.

The dependent claims are also submitted to be patentable because they set forth additional aspects of the present invention and are dependent from the independent claims discussed above. Therefore, separate and individual consideration of each dependent claim is respectfully requested.

An Information Disclosure Statement is being submitted herewith, and consideration of the document cited therein is respectfully requested.

No other matters being raised, the application is believed to be in condition for allowance, and a Notice of Allowance is respectfully requested.

Applicants' undersigned attorney may be reached in our Costa Mesa, California office by telephone at (714) 540-8700. All correspondence should be directed to our address given below.

Respectfully submitted,



Damond E. Vadnais
Attorney for Applicants
Registration No. 52,310

FITZPATRICK, CELLA, HARPER & SCINTO
30 Rockefeller Plaza
New York, New York 10112-3800
Facsimile: (212) 218-2200